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Train the Trainer Modules: Combat Training Center Archive

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Human Resources Research Organization

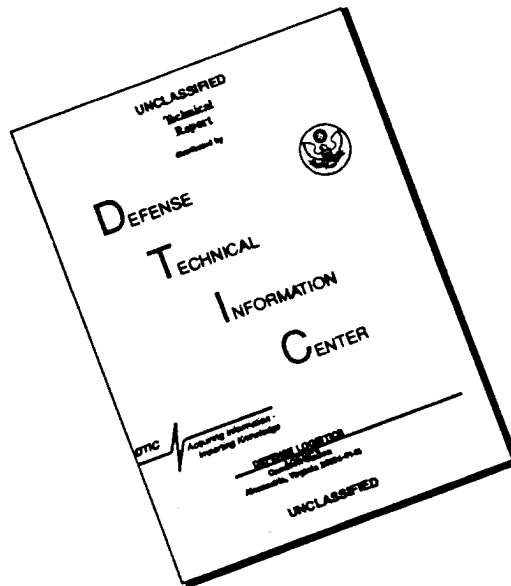19960924 115   .DTIC QUALITY INSPECTED 2

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13. ABSTRACT *(Maximum 200 words)*

During the period of performance for this project, significant enhancements and modifications were made to the following Archive Databases and Tools: Battle Replay, Graphics Database and Remote Access Instructions. The purpose of this Train the Trainer documentation report is to provide detailed remote access instructions for those CTC Archive databases and tools that were enhanced or modified during Delivery Order 28.

During the ARI, UCTRU Workshop, each participant completed database instructional modules and conducted independent research on a military training issue. As a result of the ARI, UCTRU workshop some of the participants were prepared to act as instructors for the remote workshop. The remote version of the CTC Workshop was used to train remote users to access the CTC Archive digital databases and tools via modem. The local and remote instructional modules were revised whenever the CTC Archive databases and tools were enhanced or modified.

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TRAIN THE TRAINER MODULES: COMBAT TRAINING CENTER ARCHIVE

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Train the Trainer Modules:
Combat Training Center Archive

INTRODUCTION

I. BACKGROUND

Scientists at ARI, UCTRU have conducted two versions of the Combat Training Center Data Analysis Certification Workshop for the Combined Arms Command. One version was conducted quarterly at ARI, UCTRU and one version was conducted at field sites. During the ARI, UCTRU Workshop, each participant completed database instructional modules and conducted independent research on a military training issue. As a result of the ARI, UCTRU workshop some of the participants were prepared to act as instructors for the remote workshop. The remote version of the CTC Workshop was used to train remote users to access the CTC Archive digital databases and tools via modem. The local and remote instructional modules were revised whenever the CTC Archive databases and tools were enhanced or modified.

II. PURPOSE

During the period of performance for this project, significant enhancements and modifications were made to the following Archive Databases and Tools: Battle Replay, Graphics Database and Remote Access Instructions. The purpose of this Train the Trainer documentation report is to provide detailed remote access instructions for those CTC Archive databases and tools that were enhanced or modified during Delivery Order 28.

III. OVERVIEW

There are four chapters in this document. Chapter One provides the background information and purpose for this report. In Chapter Two we have included the remote access instructions for the Battle Replay Tool. The remote access instructions for the Graphics Database are described in Chapter Three. Chapter Four provides the equipment requirements and installation instructions for the Remote Combat Analyst Work Station. In addition, we have enclosed in this report the latest digital version (Version 2.0, June 94) of the Setup software for the Remote Combat Analyst Work Station.

USING BATTLE REPLAY

**Module
Objective**

At the end of this module you will be able to use the Battle Replay archive tool to view selected battles and monitor actions of selected units and individuals.

Purpose

Replays are valuable for selecting examples of good combat performance and they provide you with both a visual as well as a statistical medium for demonstrating the effects of procedures at the NTC.

Prerequisites

Windows Tutorial
Overview of Archives Training Course
Revise Research Issue
Using TRACS

**Resources You
Will Need**

Combat Analyst Workstation

**Estimated Time to
Completion**

30 minutes

I. BATTLE REPLAY

Development of CTC Battle Replay is one of the more recent advances in the archive tools. The replays use digital data and are limited to NTC rotation force-on-force battles. Two tools are combined in the Battle Replay program: the Battle Trace, and the Battle Replay itself. You will use these tools to perform the following operations:

- Display the footprint of the battle using the Battle Trace.
- Display battle events using the Battle Replay.
- Examine the role of specific players using the Battle Replay.

A. Performance Objective

Using the Battle Replay tools, you will display the footprint of a selected battle, display battle events, and examine specified players.

B. Skills Assessment

At the end of this module you will find a Skills Assessment. If you are already prepared to demonstrate the skills described in the Performance Objective, proceed to the Skills Assessment now. Otherwise, work through the Practical Exercises in this module.

> **NOTE:** *The Battle Replay tools have been modified to accommodate missions from FY 1992 and later. If you have not worked with Battle Replay since Spring 1994, you should work through the module.*

This section gives the procedures to download files and to look at the footprint of the battle. The footprint is valuable when you study movement techniques and elements of tactics such as mass.

**Practical Exercise 1:
Downloading Files from CTC Archive**

For this exercise, work with mission N938A_10. (A mission at NTC, during rotation 938, conducted by an Armor Task Force, on the 10th day of the month).

Step	Do This	See This
1.	Double click on "Download Replay" icon under Archive Access menu area.	Download information on your progress to connect to the CTC Archive, followed by a screen showing sections for Year, Rotation, and Mission.
2.	Single click on the following: Year: *1993* Rotation: *8* Mission: *938A_10*	Buttons beside choices become dark, followed by a map of NTC terrain.
3.	Click on *Download* button.	Status bar for the file transfer, followed by PROCOMM screen.
4.	Click on the telephone icon on the PROCOMM tool bar.	Telephone hangs up.
5.	Exit PROCOMM	CTC Archive menu.

When you have successfully downloaded the file, go on to the next Practical Exercise.

Practical Exercise 2:
Downloading Files for Replay

For this exercise, work with mission N938A_10. (A mission at NTC, during rotation 938, conducted by an Armor Task Force, on the 10th day of the month).

Step	Do This	See This
1.	Double click on "Mission Replay" icon under CTC Archive menu.	Loading progress window, followed by a map of NTC terrain.
2.	Click on "Missions" (on the tool bar)	View a screen showing sections for Year, Rotation, and Mission.
3.	Single click on the following: Year: **1993** Rotation: **8** Mission: **938A_10**	Buttons beside choices become dark and mission is highlighted; followed by a map of NTC terrain.
4.	Click on "NTC Overview" (on the tool bar).	NTC terrain with markers for red and blue players. At the end of the battle, a yellow box appears.
5.	"Drag" the box: Place the curser in the box and hold the left button on the mouse down while you move the box to encompass the area where the battle occurs.	Lines of box superimposed on area.
6.	Click on "Close."	Map of NTC terrain.

When you have successfully downloaded the file, go on to the next Practical Exercise.

Practical Exercise 3:
Displaying the Footprint of the Battle Using the Battle Trace

The next practical exercise shows you how to start up Battle Replay and use the Battle Trace.

For this exercise, work with the mission you loaded in P.E. 2.

Step	Do This	See This
1.	Click on "Battle."	Menu with: Trace Replay
2.	Click on "Trace."	Watch the battle noting the symbols in the legend. At the end of the battle there will be a message: "End of Battle."
3.	Click on OK.	Map of NTC terrain.

Battle Trace Legend
• Obstacles are represented by a series of green shapes.
• Vehicles in the task force are represented by blue markers and the OPFOR by   red markers.
• Early in this battle, each shift in position represents 20 minutes (the period varies depending on the length of the battle); upon contact, each shift represents five minutes.
• Markers with white outlines show current positions; dull markers show previous positions.
• Rectangles will sometimes flash on the screen. These represent indirect fire.

When you have watched the replay and can interpret the events on the screen, move on to the next Practical Exercise. If you have any questions about the Battle Trace, contact a facilitator now.

Practical Exercise 4:
Displaying Battle Events Using the Battle Replay

Step	Do This	See This
1.	Click on "Battle."	Menu: Trace Replay
2.	Click on Replay.	NTC terrain with obstacles and OPFOR. Note the column of buttons.
3.	Start the replay by clicking on the NEXT button. You can advance the play with the NEXT button or with the Enter key.	Advance of blue and red forces. At the end of the engagement, you get the "End of Battle" notice. Note the time the battle ends--when you check on player status at the end of battle, you will need to check at the point 5 minutes prior to the end. In this case, the battle ends at 08:55; your last chance to check player positions will be at 08:50.
4.	Click on OK.	NTC terrain

Examine the role of specific players using the Battle Replay

The Battle Replay lets you control the players that are displayed. ("Players" are vehicles or selected dismounted elements.) This feature lets you focus on particular units to see their contribution to the battle. The capability includes selecting players, monitoring engagements, close up views of positions, and player position identification. The remaining practical exercises illustrate how these features work.

Practical Exercise 5:
Selecting Players for the Battle Replay

Step	Do This	See This
1.	Click on Battle, Replay	Map with red and blue forces.
2.	Click on TSKO button.	Task Organization screen showing unit names arranged to show hierarchical relationships and cross attachments. (Rotations prior to FY 92 do not have this screen.)
3.	Click on "Individuals" (on the tool bar).	Task Organization screen showing bumper numbers.
4.	Click on "Select" (on the tool bar).	SELECT menu box.
5.	Use the menu to limit the replay to maneuver companies, and company commanders (and platoon leaders) by clicking on: • All (deactivates everyone) • OPFOR, each company, and each company commander • OK	 Buttons turn light. Buttons darken. Selections are darkened on the larger screen.
6.	On the larger screen, click on SCDR and CCDR. "S" represents the Scorpion OC team (which usually indicates an infantry unit); "C" represents the Cobra team (usually an armor unit).	Selections darken.
7.	Click on "Close."	Hierarchy screen
8.	Click on "Close."	NTC terrain with selected players.

Once you start the replay, you can monitor engagements and you have two options for checking on locations of your selected players. These options are demonstrated in Practical Exercise 5.

Practical Exercise 6:
Monitoring Engagements and Player Positions during Battle Replay

Step	Do This	See This
1.	Click on EGMT button.	ENGAGEMENTS window
2.	Advance the mission to 02:00.	Last three engagements "captured" by the digital system. Most recorded engagements will be indirect fire (shown in the color of the firer, with the coordinates for the gun shown in one column and the coordinates for the impact in another).
3.	Maximize the ENGAGEMENTS screen by clicking on the right arrowhead (up). You can look at all previous engagements by scrolling up (curser on arrow along left side of the screen).	Note that at 00:20 an unknown vehicle killed an OPFOR T-72.
4.	Advance to 07:25.	Blue unit passing through obstacles near the hill mass.
5.	Click on CLSE button (for close-up).	Yellow ghost box appears.
6.	Drag the yellow box over the area around the obstacles.	Separated positions
7.	Return to the replay by clicking on "Close."	Box disappears.
8.	(Alternative for checking locations) Click on PPID button (for player position identification), move the cursor over the player you are interested in, and depress the left button on the mouse.	Screen with the identification of the player.
9.	Click on OK button.	If other vehicles are in close proximity, you will get another identification screen. When all players at the location have been identified, the screen disappears.
10.	Return to the replay by pressing the Enter key.	Replay until the End of Mission screen appears.

9

Step	Do This	See This
11.	Click on OK. If you want to repeat the mission, click on "Battle"; if you want to look at a different mission, click on "Mission" (which you should do if you are ready for the Skills Assessment); if you want to go to lunch, click on "Stop."	

How To Proceed

You have now practiced all the skills for using the Battle Replay program.
If you are confident in your ability to demonstrate those skills, complete the Skills Assessment. If you still have questions, ask one of your colleagues who has finished this segment or one of the facilitators before proceeding to the Skills Assessment.

Skills Assessment:
Battle Replay

Select Mission Replay at the Combat Analyst's Workstation and replay mission N898_M18. Based on that replay, answer the following questions.

1. Of the five E Co weapons systems that started the battle, which ones were killed or disabled before end of mission? (Note: The battle ends at 08:25.)

> E66
> E11
> E13
> E31
> E33

2. Mark the location(s) of the live E Co weapons systems at end of mission with a circle, or circles, on the map.

3. Mark the location of the task force commander at end of mission with a box on the map.
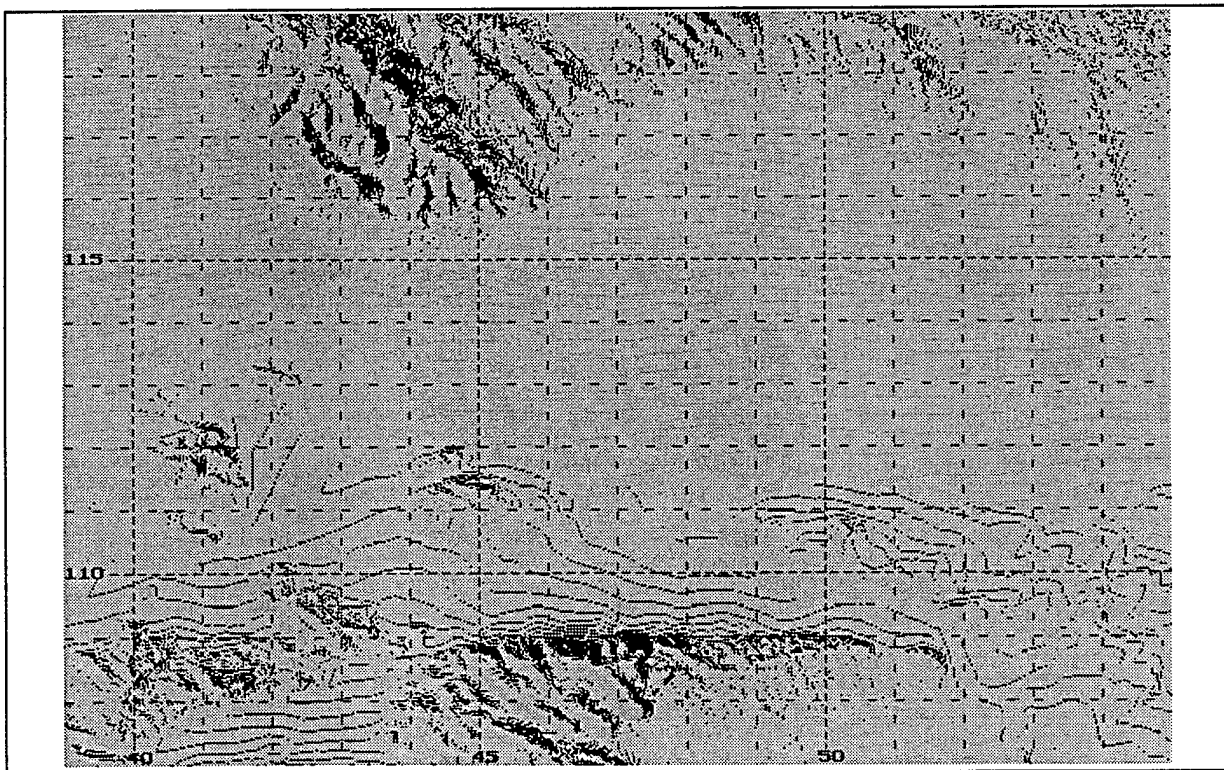
When you have completed the Skills Assessment, have a facilitator sign off the module, and use your Course Map to determine the next module to complete.

Facilitator Signature _____

Skills Assessment Feedback:
Battle Replay

Compare your answers with those below:

1. Of the five E Co weapons systems that started the battle, which ones were killed or disabled before end of mission?

        E11
        E13

2. Mark the location(s) of the live E Co weapons systems at end of mission with a circle, or circles, on the map.
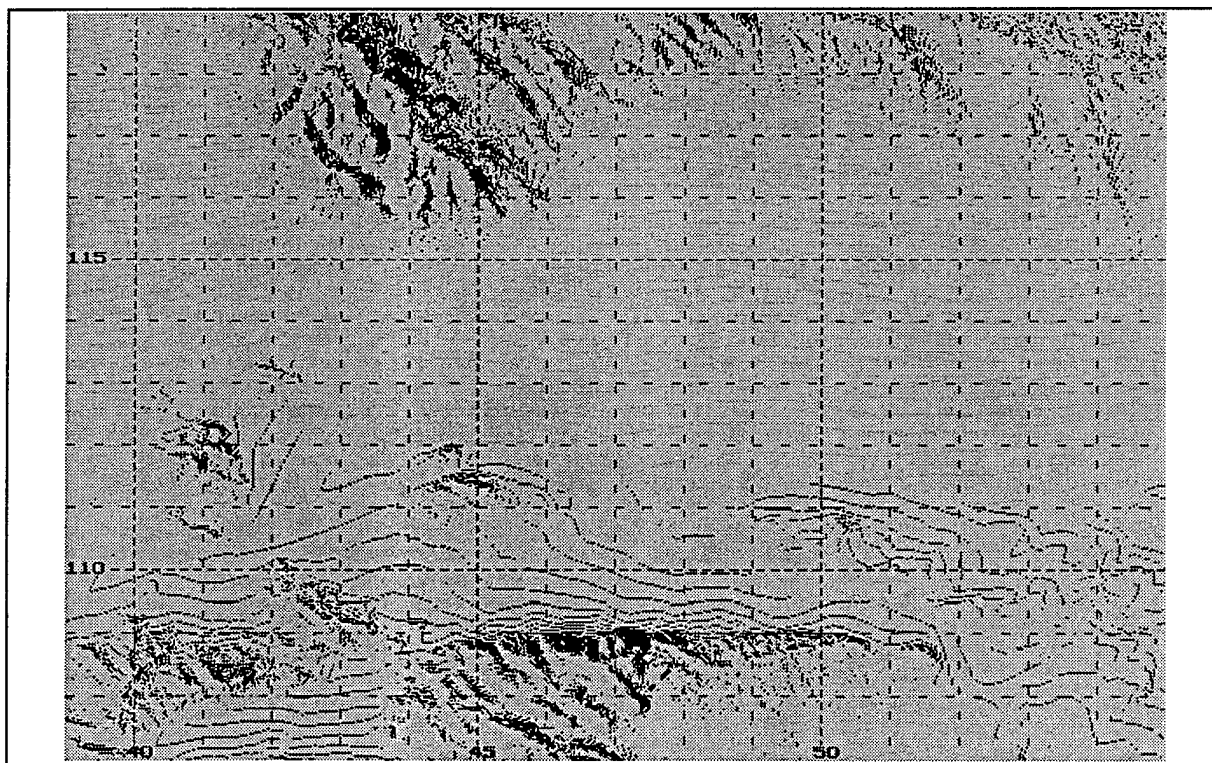
3. Mark the location of the task force commander at end of mission with a box on the map.

CHAPTER 3

USING GRAPHICS DATABASE

Module
Objective   At the end of this module you will be able to use the
                                 Graphics Database to locate digital records.

Purpose   On-line digital graphics will not only save you time, but
                                 make graphics easily portable and allow for remote access of
                                 OPORDs and overlays.

Prerequisites   Windows Tutorial
                                 Overview of the Archives Training Course
                                 Revise Research Issue
                                 Using TRACS

Resources You
Will Need   Combat Analyst Workstation

Estimated Time to
Completion   30 minutes

I. GRAPHICS DATABASE

The Graphics Database contains digital records of Task Force Overlays, Execution Matrices, and like unit generated data originally received by the Archive in paper form. The advantage of digitized graphics lies in ease and versatility of use. You can quickly call-up and view graphics and OPORD data instead of mulling through boxes of paper and overlays. Another advantage is portability of data--one floppy disk can hold multiple graphics files. In addition, graphics may also be easily imported into your word-processed research report. The biggest benefit, however, is that, through remote access, you can get the graphics without going on TDY (thus reducing your trips on a 737).

This module covers procedures necessary to retrieve and print unit generated data found in the Graphics Database. These procedures include:

- Downloading graphics files
- Displaying mission graphics
- Editing mission graphics
- Saving graphics files

A. Performance Objective

Retrieve a specific Task Force Overlay, adjust the contrast, and save it.

B. Skills Assessment

You will find a Skills Assessment at the end of this module. If you are already prepared to demonstrate the skills described in the Performance Objective, proceed to the Skills Assessment now. Otherwise, work through the Practical Exercises in this module.

Practical Exercise 1:
Downloading Graphics Files

For this P. E. download the operations overlay and execution matrix for NTC mission N922_N03 using the procedures below.

Step	Do This	See This
1	Double-click on the "Download Graphics."	Graphics Download progress, followed by a Graphics File Download menu.
2	Click on **CTC Selection** from menu.	**CTC Selection** menu
3	Click on **NTC**.	Available years become dark
4	Click on **1992**.	Available rotations become dark
5	Click on **02**.	Available missions
6	Click on **N922_N03**.	"Download Candidates" list
7	Click on **Task Force Overlay**.	
8	Click on "Add Download" (on the tool bar),	File listed under "Files to be Downloaded."
9	Click on *Download* button.	• Efforts of your computer to contact the Archive computer • Transfer status window • PROCOMM screen
10	Exit PROCOMM.	Program Manager screen

If you have any question about downloading graphics, ask a facilitator or colleague. Once your have downloaded the graphics, move to Practical Exercise 2 for the procedures to display them.

Practical Exercise 2:
Displaying Mission Graphics

Follow the procedures below to look at the digital graphics. The procedure starts from the Windows Program Manager screen.

Step	Do This	See This
1	Double click on "View Graphics" icon.	Configure Base Drive screen
2	Set to your drive (default = C).	View Graphics Menu
2	Click on **CTC Selection**.	**CTC Selection** list drops down.
3	Click on **NTC**.	Available years become dark.
4	Click on **1992**.	Available rotations become dark.
5	Click on **02**.	Available missions appear.
6	Click on **N922_N03**.	Available graphics appear.
7	Click on **Task Force Overlay**.	Graphic appears on screen

If you have any difficulty displaying the graphics, consult a facilitator or colleague.

You have a variety of tools for altering the graphic. Explanations of basic features are given below. Information on other options for manipulation are under the Help Index in the upper right hand corner of the Tool Bar (double click gets you into Help).

Feature	Command
Lighten over-all image	[F8] (see pallet under **Edit** menu)
Darken over-all image	[F7] (see pallet)
Increase contrast	[F10] (see pallet); alt+[F10] (Gamma+)
Decrease contrast	[F9] (see pallet); alt+[F9] (Gamma-)
Rotate 90 degrees	Click on **Rotate** from the **Edit** menu.
Enlarge or reduce image	Click on desired size increase or decrease from the **Edit** menu.
Dither entire image	Click on **Quick Dither** from the **Options** menu.
Use entire page to print image	Click on **Full Page Print** from the **Options** menu.

Practical Exercise 3:
Edit Mission Graphics

Using the commands you have just studied, edit the Task Force Overlay from mission N922_N03:

Step	Do This	See This
1	Rotate your graphic	Image rotates so the left of the image is at the top of the screen
2	Use Quick Dither	Creates a grayish background that reduces the smudgy look of some graphics. Not all graphics will benefit from this process.
3	Check under the **Options** menu that **Resize To Scale** is checked off. If not, select it and proceed.	
4	Size your graphic by using the **Resize X2** feature in the **Edit** menu.	Graphic is twice its original size. You will usually enlarge the image to at least twice its initial on-screen size when you plan to print the image.

Search the Help feature if you wish to know more about the other commands in the **File, Edit,** and **Options** menus. If you edit too much, the image becomes unreadable. If that happens, exit the file and display it again (you do not have to repeat the download procedure).

If you have any questions about editing the graphics, ask a facilitator or colleague now. If you are confident using the editing commands, proceed to the next Practical Exercise.

Practical Exercise 4:
Saving Graphics Files

If you are going to include a graphic in a briefing or report, you must save the graphic file. Use the procedures below to save your graphic.

Step	Do This	See This
1	Choose **Save** from the **File** menu.	"Select File to Save Image To"
2	Click on **Format**.	Window enlarges to display formats
3	Click on desired format (If you are working with recent versions of Word Perfect, you should save each file in the PCX format.)	
4	Select the drive and enter the directory where you want the file to be.	
5	Click on **Save**.	

When you have completed the Practical Exercises for this module, go on to the Skills Assessment.

Skills Assessment:
Using Graphics Database

Demonstrate your skills in using the Graphics database by completing the steps below:

1. Retrieve N927_M13.OP1 Task Force Operations Overlay and the Execution Matrix for mission N927_M13.

2. Save the graphics and print them through your local system.

Show the copies of the two graphics to one of the facilitators.

When you have completed the Skills Assessment, have your facilitator sign off this module, and use your Course Map to determine the next module to complete.

Facilitator Signature

_____

SET UP REMOTE COMBAT ANALYST WORKSTATION (CAW)

SET UP REMOTE COMBAT ANALYST WORKSTATION (CAW)

• To install the Remote Combat Analyst Workstation there are certain prerequisites:

HARDWARE:
- i386 or better computer
- Hayes compatible Modem (strongly recommend 9600 baud or better)
- 40mb or more fixed disk drive
- 4mb or more RAM memory

SOFTWARE:
- DOS operating system Ver 3.1 or newer
- The following installed in the C: drive:
    MS WINDOWS 3.1 (path c:\windows)
    PROCOMM PLUS for WINDOWS (path c:\prowin)

• Insert CORF installation disc (provided) into the A: drive.

• Enter Windows.

• Activate Run (under File).

• Type on the command line: A:SETUP (then click on OK)

• After you read the READ ME file, close the file (File, Exit).

• Follow the prompts for the installation:

-- The prompt after the first phase asks if you want to add the program to the Windows program manager. You do.

-- If you have special dialing procedures at your location, enter the codes at the prompts for prefix or suffix and click on OK. If you do not have special procedures, click on CANCEL. The last prompt is the complete dialing string. If you did not add a prefix or suffix, click on Yes.

• If you do not have a high-speed MODEM, enter the Dialing Directory of PROCOMM Plus and set the baud rates for the POM applications to the highest rate your MODEM will accept.